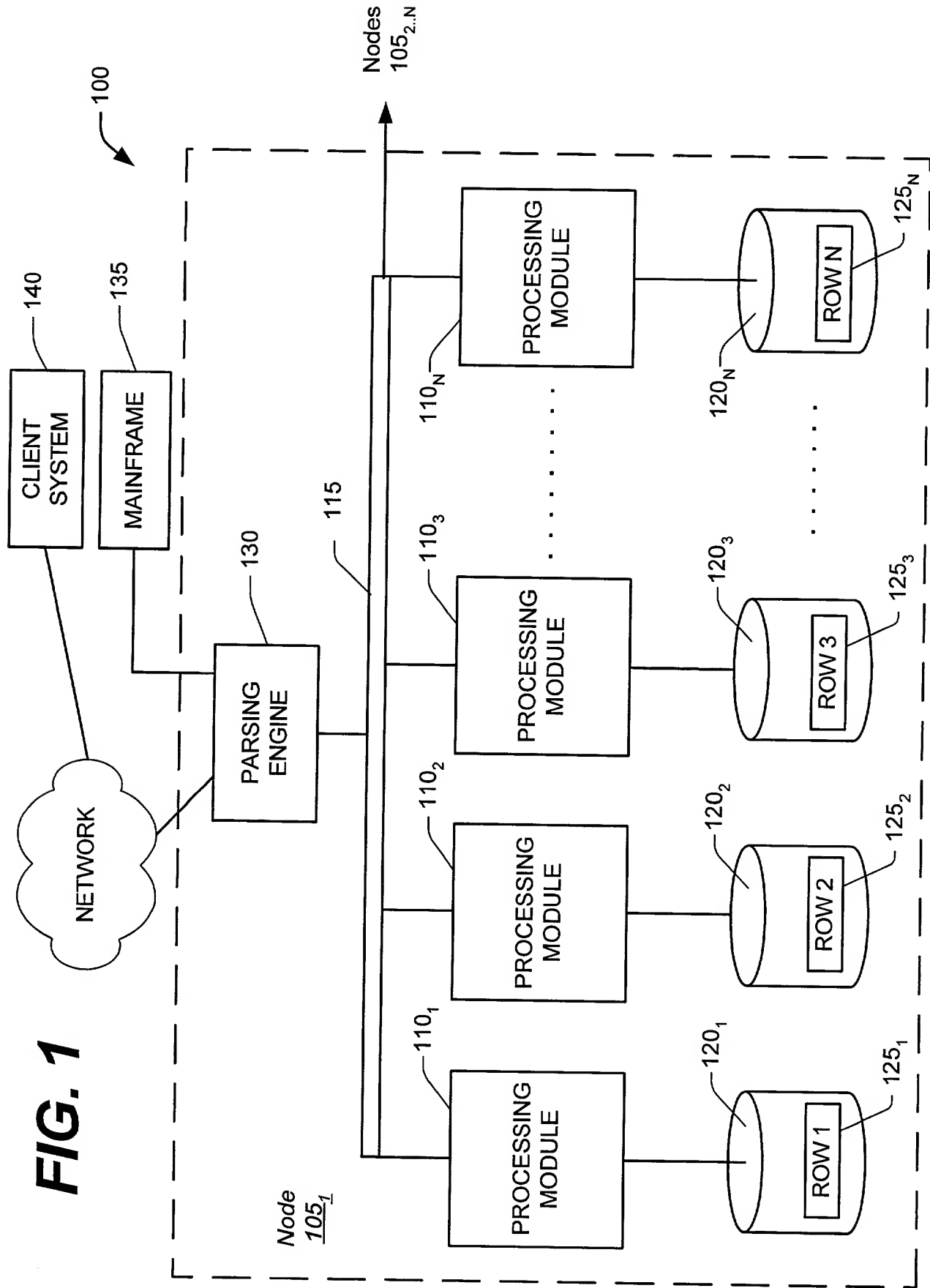


FIG. 1



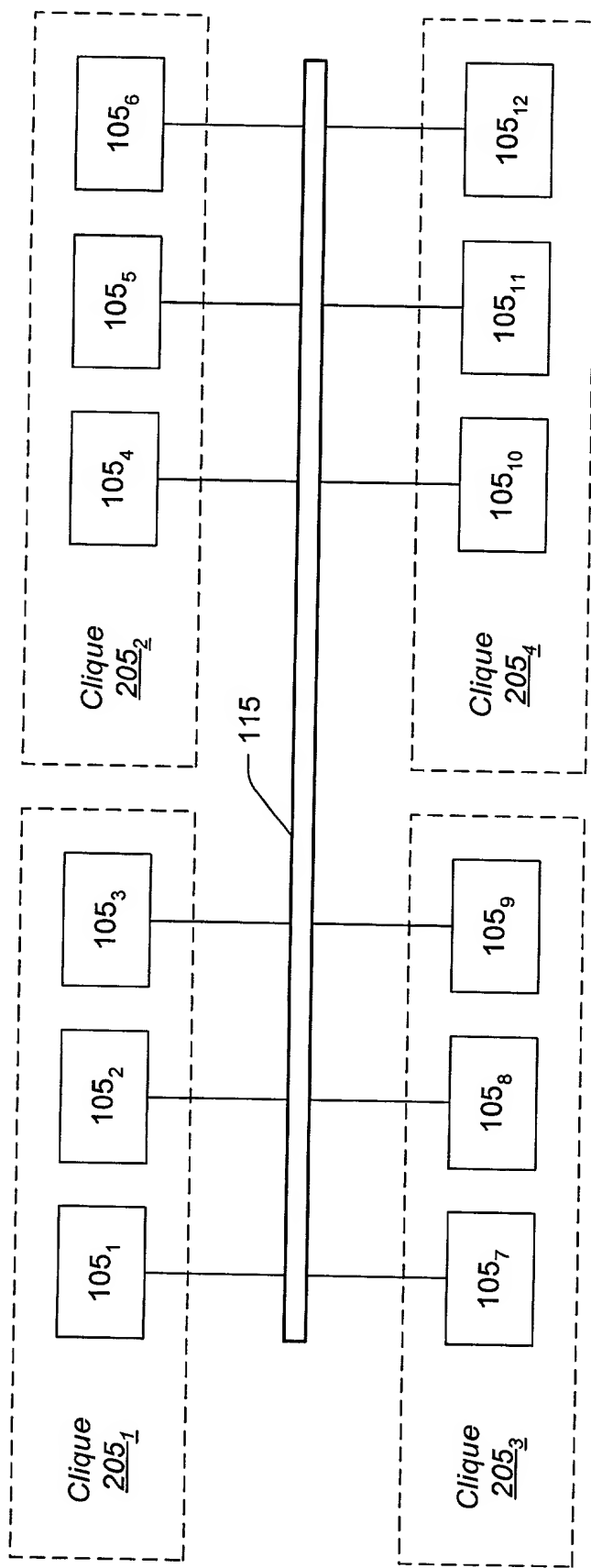


FIG. 2

FIG. 3

```
graph TD
    START([START]) --> 312[DETERMINE VALID NODES]
    subgraph 314 [ ]
        312 --> 316[CREATE NEXT VIRTUAL PROCESS VPROC]
        316 --> 318[ASSOCIATE VPROC WITH PROCESSOR AND STORAGE RESOURCES OF VALID NODE]
    end
    318 --> 310{MORE VPROCS?}
    310 -- YES --> 312
    310 -- NO --> 320[RECORD VPROC DEFINITION(S) AS A NEW ENTRY IN THE CONFIGURATION TABLE]
    320 --> 322[DATABASE SYSTEM COMES ONLINE TO INITIATE AND RESTART TRANSACTIONS]
    322 --> 321[ASSIGN INITIATED TRANSACTION GROUPS ACCORDING TO NEW ENTRY]
    321 --> 324[TRANSACTIONS PROCEED WITH ACTIVE GROUPS IN ACCORDANCE WITH ASSOCIATED ENTRIES]
    324 --> 328[REMOVE CONFIGURATION TABLE ENTRIES NOT ASSOCIATED WITH ACTIVE GROUPS]
    328 --> 326{NODE RESTORED OR ADDED?}
    326 -- YES --> 320
    326 -- NO --> 329[IDENTIFY VPROC DEFINITIONS UNAFFECTED BY FAILED NODE]
    329 --> 330[DEACTIVATE ALL TRANSACTION ACTIVITY CORRESPONDING TO GROUPS HAVING VPROC MEMBERS IN FAILED NODE]
    330 --> 327{NODE FAILED?}
    327 -- YES --> 329
    327 -- NO --> 321
```

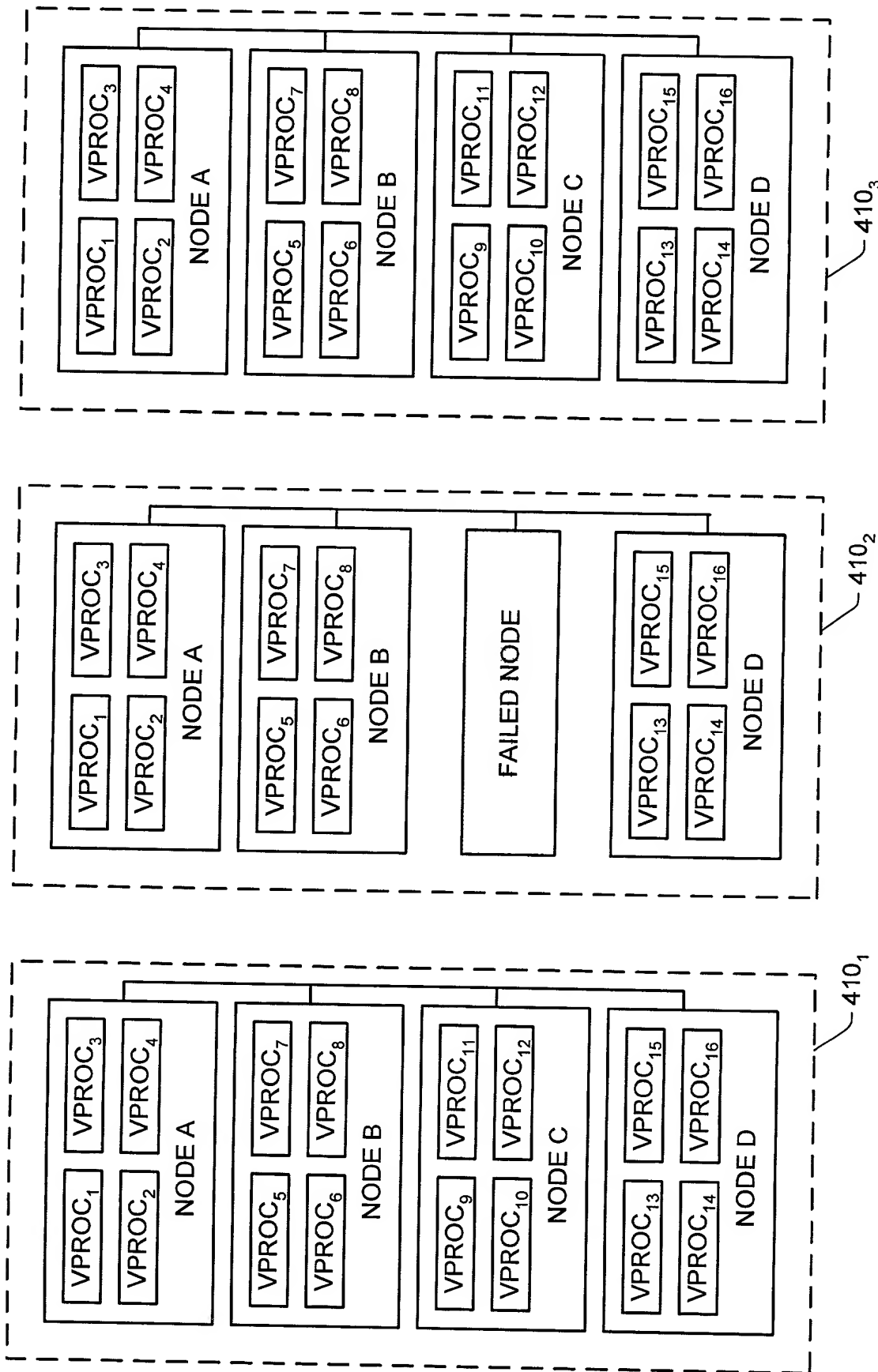


FIG. 4

Active Configurations			
configuration version	nodes	virtual processors*	inuse
101	A, B, C, D	vprocs 1-16	yes
102	A, B, D	vprocs 1-8, 13-16	yes
103	A, B, C, D	vprocs 1-16	yes

* Each virtual processor is associated with a node

Transactions				
transaction	transaction group	configuration version	valid*	member vprocs
1024	2002	101	yes	vproc 2, 4, 5, 6, 13, 15, 16
1025	2003	101	no	vproc 1, 2, 3, 4, 5, 8, 10, 11
1026	2004	102	yes	vproc 2, 3, 4, 6, 13, 14, 15
1027	2005	103	yes	vproc 1, 4, 6, 8, 12, 16
1024	2006	103	yes	vproc 3, 5, 6, 8, 9, 11, 14

* Validity of the transaction group

FIG. 5